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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,455	11/19/1999	KONRAD WEGENER	852/48374	7275

7590

06/20/2002

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EXAMINER

EDMONDSON, LYNNE RENEE

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 06/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/443,455

Applicant(s)

WEGENER ET AL.

Examiner

Lynne R. Edmondson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Interview Summary

Application No.

09/443,455

Applicant(s)

WEGENER ET AL.

Examiner

Lynne Edmondson

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All participants (applicant, applicant's representative, PTO personnel):

(1) Lynne Edmondson.

(3) James McKeown.

(2) Ann Denikos.

(4) _____.

Date of Interview: 06 June 2002.

Type: a) ☒ Telephonic b) ☐ Video Conference

c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.

If Yes, brief description: _____.

Claim(s) discussed: none.

Identification of prior art discussed: _____.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The office action mailed 12/17/01 was never received by applicant's representative as the action was mailed to the wrong address (Akron, OH). The action will be mailed to the correct address (Washington, DC) with a restart of the time period.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☐ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 line 2 contains the term "beam machining". The terminology is not clear. For examination purposes it is presumed that beam machining refers to e-beam machining or laser beam machining.

Claim 4 line 3 contains the term "application machining". The terminology is not clear, as any type of machining is some form of application.

Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al. (EPN 0008773 A1).

Clark teaches a method of forming a workpiece in a forming system which has at least one forming station comprising transporting the workpiece between stations and carrying out machining (cutting) with a laser energy feed to the workpiece (page 2 lines 18-22, page 3 lines 6-9 and page 7 lines 20-25) wherein the machining is fixedly arranged on the forming system (page 4 lines 7-17). The system operates at a predetermined cycle (page 10 lines 17-34). Machining may be carried out during transport of the workpiece (page 10 lines 5-16) or while the workpiece is stationary and situated on a depositing element (page 9 lines 5-17). See Clark claims 1 and 4 and figures 1-2.

3. Claims 1 and 6-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Dyble et al. (USPN 5597433).

Dyble teaches a process for forming workpieces in a forming system which has at least one forming station (figure 3) and a machining (welding) station (figure 4) wherein workpieces are transported to and from each station (col 2 lines 26-60 and figure 48) wherein welding is performed with a local energy feed (preferably ultrasonic but may also be heat sealing) (col 11 lines 13-16). The forming system operates at a predetermined cycle (col 17 lines 38-56). A carriage (transport) moves the workpiece during machining. The workpiece is deposited on an intermediate device (mandrel) during machining and is moved through the welding station which serves a rotary

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conveyance or transport device (col 9 line 59 – col 10 line 40). The machining device is provided with a welder (360) which moves perpendicularly to the original transport direction (col 10 line 52 – col 11 line 25). The transport device comprises rails (185) and a suction bridge (180) (col 7 line 54 – col 8 line 15) with guiding and manipulating elements (165, 170, 175) and a slide block (col 8 lines 15-49) to which the machining (welding) element is mounted (col 9 line 47 – col 10 line 40). The machining element is adjustable by moving transversely to the transport direction (vertical movement) (col 11 lines 5-25). The device is programmable (col 6 lines 59-65). A vertically moveable cross traverse (865) for lifting and lowering the workpiece is shown in figure 19 (col 18 lines 1-16). See also figures 1, 2 and 20 and Dyble claims 2, 4, 9, 18-21, 23 and 26-32.

4. Claims 12-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruns (USPN 5140839).

Bruns teaches a forming system comprising at least one forming station (first stamping station), means for transporting workpieces between stations a machining station (final stamping station) and a machining device arranged on the transport device (col 2 lines 50-64). However, the machining elements may also be fixed. The transport device has at least one suction bridge (cross bar with vacuum cups) moveably arranged on a rail with a guiding element and programmable manipulation devices (pivotal arms) attached to the machining elements (col 3 lines 31-56 and col 9 lines 20-32). The transport device has slide blocks (88) mounted to the machining elements for adjustment transversely (vertically) to the transport direction of the workpiece (col 4 line

42 – col 5 line 5). The manipulation devices have cross traverses (bars) and stroke elements for vertical adjustments (lift/lower) and are arranged to be moveable perpendicularly to the transport direction. Elements may also move linearly (forward/aft) (col 5 lines 43-67 and col 6 lines 31-51). See also Bruns claims 1-9 and 18-21 and figures 2, 3 and 9a-9c.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (EPN 0008773 A1) in view of Brandstetter (USPN 5012665).

Clark teaches a method of forming a workpiece in a forming system which has at least one forming station comprising transporting the workpiece between stations and carrying out machining (cutting) with a laser energy feed to the workpiece (page 2 lines 18-22, page 3 lines 6-9 and page 7 lines 20-25) wherein the machining is fixedly arranged on the forming system (page 4 lines 7-17). The system operates at a predetermined cycle (page 10 lines 17-34). Machining may be carried out during transport of the workpiece (page 10 lines 5-16) or while the workpiece is stationary and situated on a depositing element (page 9 lines 5-17). See Clark claims 1 and 4 and

figures 1-2. However, there is no disclosure of an intermediate depositing device for situating the workpiece.

Brandstetter teaches a method of forming a workpiece which is transported between stations and situated on intermediate depositing devices between stations (col 3 lines 53-63 and col 4 line 56 – col 5 line 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ an intermediate workpiece depositing device for simple control of workpiece movement (Clark, page 8 lines 9-12 and thereby facilitate material handing for high speed, highly accurate machining (Clark, page 2 lines 1-8).

6. Claims 2-5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyble et al. (USPN 5597433) in view of Morita et al. (USPN 4814576).

Dyble teaches a process for forming workpieces in a forming system which has at least one forming station (figure 3) and a machining (welding) station (figure 4) wherein workpieces are transported to and from each station (col 2 lines 26-60 and figure 48) wherein welding is performed with a local energy feed (preferably ultrasonic but may also be heat sealing) (col 11 lines 13-16). The forming system operates at a predetermined cycle (col 17 lines 38-56). A carriage (transport) moves the workpiece during machining. The workpiece is deposited on an intermediate device (mandrel) during machining and is moved through the welding station which serves a rotary conveyance or transport device (col 9 line 59 – col 10 line 40). The machining device is provided with a welder (360) which moves perpendicularly to the original transport

direction (col 10 line 52 – col 11 line 25). The transport device comprises rails (185) and a suction bridge (180) (col 7 line 54 – col 8 line 15) with guiding and manipulating elements (165, 170, 175) and a slide block (col 8 lines 15-49) to which the machining (welding) element is mounted (col 9 line 47 – col 10 line 40). The machining element is adjustable by moving transversely to the transport direction (vertical movement) (col 11 lines 5-25). The device is programmable (col 6 lines 59-65). A vertically moveable cross traverse (865) for lifting and lowering the workpiece is shown in figure 19 (col 18 lines 1-16). However there is no disclosure of laser beam machining.

Morita teaches a system comprising at least one laser machining element (col 1 lines 6-7) for forming workpieces with at least one forming station (43) and at least one machining station (44) wherein workpieces are transported between stations (col 1 line 54 – col 2 line 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ laser beam machining elements as tools for a high speed, controlled heat sealing welds (Dyble, col 11 lines 13-16) easily and rapidly when forming thermoplastic materials without blow molding or extrusion (Dyble, col 1 lines 6-16).

Response to Arguments

7. In response to applicant's argument that the Clark reference is used for forming two dimensional rather than three dimensional contours, a recitation of the intended use

of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Therefore the 102 rejection of claims 1-9 and 13 as anticipated by Clark and the 103 rejection of claims 10 and 11 as obvious over Clark in view of Brandstetter stand.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., formation of three dimensional structures, ability to move in more than just a vertical direction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The instant claims disclose only movement, not a particular type of movement or direction. Therefore the 102 rejection of claims 1-9 and 13 as anticipated by Clark and the 103 rejection of claims 10 and 11 as obvious over Clark in view of Brandstetter stand.

9. Regarding applicant's argument that Bruns does not teach a machining station with local energy feeding, Bruns teaches multiple stamping stations with the first station

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serving to form the part and the final station serving to finish or machine the part to the desired shape and size (col 2 lines 50-61 and col 1 lines 5-20). Each station is independently controlled (col 2 lines 50-57), operated (col 5 lines 43-68) and powered by a local motors (local energy feed) (col 7 lines 59-67 and col 10 lines 22-42).

Therefore the 102 rejection of claims 12-24 as anticipated by Bruns stands.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kimbrell (USPN 3656385), Pryor (USPN 5380978), Deane (USPN 3578935), Hofele et al. (USPN 5842370), Nashiki (USPN 5359872), Yoshiaki (USPN 5500507), Vanderzee et al. (USPN 5782129) and Klingel (USPN 4698480).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne R. Edmondson whose telephone number is 703-306-5699. The examiner can normally be reached on M-F from 7-4, with alternate Fridays off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

LRE
December 17, 2001


TOM DUNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700